

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A method of using vaults as carrier molecules to deliver one or more than one substance to an organism, or to a specific tissue or to specific cells, or to an environmental medium, comprising:

- a) providing vaults;
- b) incorporating the one or more than one substance into the vaults; and
- c) administering the vaults comprising the one or more than one substance to the organism, to the specific tissue, to the specific cells, or to the environmental medium.

2. (original) The method of claim 1, where the vaults provided are purified from natural sources.

3. (original) The method of claim 1, where the vaults provided are generated using recombinant technology.

4. (original) The method of claim 1, where incorporation is accomplished by incubating the vaults with the one or more than one substance.

5. (original) The method of claim 1, where the one or more than one substance is selected from the group consisting of an enzyme, a pharmaceutical agent, a plasmid, a polynucleotide, a polypeptide, a sensor and a combination of the preceding.

6-49. (canceled)

50. (original) A method of delivering one or more than one substance to an organism, to a specific tissue, to specific cells, or to an environmental medium, comprising:

- a) providing vault-like particles comprising the one or more than one substance; and
- b) administering the vault-like particles comprising the one or more than one substance to the organism, tissue, cells or environmental medium.

51. (canceled)

52. (original) The method of claim 50, where the vault-like particles comprise a modified VPARP or modified portion of VPARP.

53. (canceled)

54. (original) The method of claim 50, where the one or more than one substance is selected from the group consisting of an enzyme, a pharmaceutical agent, a plasmid, a polynucleotide, a polypeptide, a sensor and a combination of the preceding.

55. (original) The method of claim 50, where the one or more than one substance is adenosine deaminase.

56. (original) A method of delivering one or more than one sensor to an organism, to a specific tissue, to specific cells, or to an environmental medium, comprising:

- a) providing a vault-like particle comprising the one or more than one sensor; and
- b) administering the vault-like particle to the organism, specific tissue, specific cells, or environmental medium.

57. (canceled)

58. (original) The method of claim 56, where the vault-like particles comprise a modified VPARP or modified portion of VPARP.

59. (canceled)

60. (original) The method of claim 56, where the sensor is selected from the group consisting of a chemical sensor, a fluorescent sensor, an ionic sensor, a microorganism sensor, an optical sensor, and a pH sensor.

61-66. (canceled)